

AMENDMENTS TO THE CLAIMS:

1 1. (Currently amended) A probe apparatus for testing a circuit chip, said probe
 2 apparatus comprising a probe group having two or more probes, each of said two
 3 or more probes having a conductive core, an insulation layer, and a tip, at least
 4 two of said two or more probes having a common contacting center within a probe
 5 target area, and each of said two or more probes independently, ^{mutually} conductively
 6 contacting within a guiding boundary ~~for independently conductively contacting a~~
 7 single terminal of said circuit chip and allowing a test path resistance be measured
 8 without affecting said circuit chip.

324/754+

1 2. (Previously amended) The probe apparatus of claim 1, further comprising an
 2 electronic circuit capable of recognizing said test path resistance and
 3 correspondingly compensating a voltage drop of an operational signal passing
 4 through at least one of said probes.

C
 1 3. (Original) The probe apparatus of claim 2, wherein said probe group comprises
 2 three probes and said electronic circuitry is capable of recognizing
 3 a) a first path resistance of said resistance condition between said first and
 4 said second contacting means along said single test terminal;
 5 b) a second path resistance of said resistance condition between said first and
 6 said third contacting means along said single test terminal;
 7 c) a third path resistance of said resistance condition between said second and
 8 said third contacting means along said single test terminal; and
 9 wherein said electronic circuitry is capable of compensating said voltage drop
 10 individually and in correspondence to one, two or three operational signal paths
 11 related to said probes.

1 4. (Original) The probe apparatus of claim 2, wherein said probe group comprises
 2 four probes and said electronic circuitry is capable of recognizing said test path
 3 resistance according to 4-Wire Ohm's Measurement.

- 1 5. (Original) The probe apparatus of claim 1, wherein at least one of said two or
2 more probes is a buckling beam.
- 1 6. (Original) The probe apparatus of claim 1, wherein said probe group is bundled in
2 a single perforation of a sheath being part of said probe apparatus.
- 1 7. (Original) The probe apparatus of claim 6, wherein said single perforation is a long
2 hole.
- 1 8. (Original) The probe apparatus of claim 6, wherein said single perforation is a
2 circular hole.
- 1 9. (Original) The probe apparatus of claim 1, wherein said two or more probes have
2 probe tips essentially concentrically arranged in correspondence to a rotation axis
3 of said single terminal having a rotationally symmetric and non planar contact
4 surface such that said two or more probes contact said single terminal in a self
5 centering fashion.
- 1 10. (Original) The probe apparatus of claim 9, wherein said probe tips are essentially
2 spherical.
- 1 11. (Original) A method for compensating a voltage drop of an operational signal
2 passing through an operational signal path having a constant resistance and a
3 variable resistance related to a contact quality of a probe and a terminal of said
4 operational signal path, said method comprising the steps of:
5 contacting said terminal with a group of two or more of said probes;
6 recognizing a path resistance along said probes of said group, said
7 terminal and interfaces between said probes and said terminal;
8 deriving an operational signal path resistance from said path resistance;
9 and

10 compensating said voltage drop in correspondence to said operational signal path
11 resistance.

- CI
Conf
12. (Previously amended) The method of claim 11, wherein said contacting is provided by
13 said group including a first, a second and a third of said probes, wherein said
14 recognizing includes recognizing a first, second and a third path resistance
15 corresponding to said first, second and said third of said probes, and wherein said
16 deriving includes deriving an absolute value of a first, second and third operational
17 signal path resistance corresponding to said first, second and said third path
18 resistance.
-